

SEQUENCE LISTING

<110> ROSS, JEFFREY S.

<120> METHODS OF DIAGNOSING AND TREATING CANCER

<130> M2051-700410

<140> 10/736,112

<141> 2003-12-15

<150> 60/439,205

<151> 2003-01-10

<160> 5

<170> PatentIn version 3.5

<210> 1

<211> 750

<212> PRT

<213> Homo sapiens

<400> 1

Met Trp Asn Leu Leu His Glu Thr Asp Ser Ala Val Ala Thr Ala Arg
1 5 10 15

Arg Pro Arg Trp Leu Cys Ala Gly Ala Leu Val Leu Ala Gly Gly Phe
20 25 30

Phe Leu Leu Gly Phe Leu Phe Gly Trp Phe Ile Lys Ser Ser Asn Glu
35 40 45

Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala Phe Leu Asp Glu
50 55 60

Leu Lys Ala Glu Asn Ile Lys Lys Phe Leu Tyr Asn Phe Thr Gln Ile
65 70 75 80

Pro His Leu Ala Gly Thr Glu Gln Asn Phe Gln Leu Ala Lys Gln Ile
85 90 95

Gln Ser Gln Trp Lys Glu Phe Gly Leu Asp Ser Val Glu Leu Ala His
100 105 110

Tyr Asp Val Leu Leu Ser Tyr Pro Asn Lys Thr His Pro Asn Tyr Ile
115 120 125

Ser Ile Ile Asn Glu Asp Gly Asn Glu Ile Phe Asn Thr Ser Leu Phe
130 135 140

Glu Pro Pro Pro Pro Gly Tyr Glu Asn Val Ser Asp Ile Val Pro Pro
145 150 155 160

Phe Ser Ala Phe Ser Pro Gln Gly Met Pro Glu Gly Asp Leu Val Tyr
165 170 175

Val Asn Tyr Ala Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Asp Met
180 185 190

Lys Ile Asn Cys Ser Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Val
195 200 205

Phe Arg Gly Asn Lys Val Lys Asn Ala Gln Leu Ala Gly Ala Lys Gly
210 215 220

Val Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Gly Val Lys
225 230 235 240

Ser Tyr Pro Asp Gly Trp Asn Leu Pro Gly Gly Gly Val Gln Arg Gly
245 250 255

Asn Ile Leu Asn Leu Asn Gly Ala Gly Asp Pro Leu Thr Pro Gly Tyr
260 265 270

Pro Ala Asn Glu Tyr Ala Tyr Arg Arg Gly Ile Ala Glu Ala Val Gly
275 280 285

Leu Pro Ser Ile Pro Val His Pro Ile Gly Tyr Tyr Asp Ala Gln Lys
290 295 300

Leu Leu Glu Lys Met Gly Gly Ser Ala Pro Pro Asp Ser Ser Trp Arg
305 310 315 320

Gly Ser Leu Lys Val Pro Tyr Asn Val Gly Pro Gly Phe Thr Gly Asn
325 330 335

Phe Ser Thr Gln Lys Val Lys Met His Ile His Ser Thr Asn Glu Val
340 345 350

Thr Arg Ile Tyr Asn Val Ile Gly Thr Leu Arg Gly Ala Val Glu Pro
355 360 365

Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe Gly
370 375 380

Gly Ile Asp Pro Gln Ser Gly Ala Ala Val Val His Glu Ile Val Arg
385 390 395 400

Ser Phe Gly Thr Leu Lys Lys Glu Gly Trp Arg Pro Arg Arg Thr Ile
405 410 415

Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr
420 425 430

Glu Trp Ala Glu Glu Asn Ser Arg Leu Leu Gln Glu Arg Gly Val Ala
435 440 445

Tyr Ile Asn Ala Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val
450 455 460

Asp Cys Thr Pro Leu Met Tyr Ser Leu Val His Asn Leu Thr Lys Glu
465 470 475 480

Leu Lys Ser Pro Asp Glu Gly Phe Glu Gly Lys Ser Leu Tyr Glu Ser
485 490 495

Trp Thr Lys Lys Ser Pro Ser Pro Glu Phe Ser Gly Met Pro Arg Ile
500 505 510

Ser Lys Leu Gly Ser Gly Asn Asp Phe Glu Val Phe Phe Gln Arg Leu
515 520 525

Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr Lys Asn Trp Glu Thr Asn
530 535 540

Lys Phe Ser Gly Tyr Pro Leu Tyr His Ser Val Tyr Glu Thr Tyr Glu
545 550 555 560

Leu Val Glu Lys Phe Tyr Asp Pro Met Phe Lys Tyr His Leu Thr Val
565 570 575

Ala Gln Val Arg Gly Gly Met Val Phe Glu Leu Ala Asn Ser Ile Val
580 585 590

Leu Pro Phe Asp Cys Arg Asp Tyr Ala Val Val Leu Arg Ser Tyr Ala
595 600 605

Asp Lys Ile Tyr Ser Ile Ser Met Lys His Pro Gln Glu Met Lys Thr
610 615 620

Tyr Ser Val Ser Phe Asp Ser Leu Phe Ser Ala Val Lys Asn Phe Thr
625 630 635 640

Glu Ile Ala Ser Lys Phe Ser Glu Arg Leu Gln Asp Phe Asp Lys Ser
645 650 655

Asn Pro Ile Val Leu Arg Met Met Asn Asp Gln Leu Met Phe Leu Glu
660 665 670

Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro Asp Arg Pro Phe Tyr Arg
675 680 685

His Val Ile Tyr Ala Pro Ser Ser His Asn Lys Tyr Ala Gly Glu Ser
690 695 700

Phe Pro Gly Ile Tyr Asp Ala Leu Phe Asp Ile Glu Ser Lys Val Asp
705 710 715 720

Pro Ser Lys Ala Trp Gly Glu Val Lys Arg Gln Ile Tyr Val Ala Ala
725 730 735

Phe Thr Val Gln Ala Ala Ala Glu Thr Leu Ser Glu Val Ala
740 745 750

<210> 2

<211> 693

<212> PRT

<213> Homo sapiens

<400> 2

Met Lys Ala Phe Leu Asp Glu Leu Lys Ala Glu Asn Ile Lys Lys Phe
1 5 10 15

Leu Tyr Asn Phe Thr Gln Ile Pro His Leu Ala Gly Thr Glu Gln Asn
20 25 30

Phe Gln Leu Ala Lys Gln Ile Gln Ser Gln Trp Lys Glu Phe Gly Leu
35 40 45

Asp Ser Val Glu Leu Ala His Tyr Asp Val Leu Leu Ser Tyr Pro Asn
50 55 60

Lys Thr His Pro Asn Tyr Ile Ser Ile Ile Asn Glu Asp Gly Asn Glu
65 70 75 80

Ile Phe Asn Thr Ser Leu Phe Glu Pro Pro Pro Gly Tyr Glu Asn
85 90 95

Val Ser Asp Ile Val Pro Pro Phe Ser Ala Phe Ser Pro Gln Gly Met
100 105 110

Pro Glu Gly Asp Leu Val Tyr Val Asn Tyr Ala Arg Thr Glu Asp Phe
115 120 125

Phe Lys Leu Glu Arg Asp Met Lys Ile Asn Cys Ser Gly Lys Ile Val
130 135 140

Ile Ala Arg Tyr Gly Lys Val Phe Arg Gly Asn Lys Val Lys Asn Ala
145 150 155 160

Gln Leu Ala Gly Ala Lys Gly Val Ile Leu Tyr Ser Asp Pro Ala Asp
165 170 175

Tyr Phe Ala Pro Gly Val Lys Ser Tyr Pro Asp Gly Trp Asn Leu Pro
180 185 190

Gly Gly Gly Val Gln Arg Gly Asn Ile Leu Asn Leu Asn Gly Ala Gly
195 200 205

Asp Pro Leu Thr Pro Gly Tyr Pro Ala Asn Glu Tyr Ala Tyr Arg Arg
210 215 220

Gly Ile Ala Glu Ala Val Gly Leu Pro Ser Ile Pro Val His Pro Ile
225 230 235 240

Gly Tyr Tyr Asp Ala Gln Lys Leu Leu Glu Lys Met Gly Gly Ser Ala
245 250 255

Pro Pro Asp Ser Ser Trp Arg Gly Ser Leu Lys Val Pro Tyr Asn Val
260 265 270

Gly Pro Gly Phe Thr Gly Asn Phe Ser Thr Gln Lys Val Lys Met His
275 280 285

Ile His Ser Thr Asn Glu Val Thr Arg Ile Tyr Asn Val Ile Gly Thr
 290 295 300

Leu Arg Gly Ala Val Glu Pro Asp Arg Tyr Val Ile Leu Gly Gly His
 305 310 315 320

Arg Asp Ser Trp Val Phe Gly Gly Ile Asp Pro Gln Ser Gly Ala Ala
 325 330 335

Val Val His Glu Ile Val Arg Ser Phe Gly Thr Leu Lys Lys Glu Gly
 340 345 350

Trp Arg Pro Arg Arg Thr Ile Leu Phe Ala Ser Trp Asp Ala Glu Glu
 355 360 365

Phe Gly Leu Leu Gly Ser Thr Glu Trp Ala Glu Glu Asn Ser Arg Leu
 370 375 380

Leu Gln Glu Arg Gly Val Ala Tyr Ile Asn Ala Asp Ser Ser Ile Glu
 385 390 395 400

Gly Asn Tyr Thr Leu Arg Val Asp Cys Thr Pro Leu Met Tyr Ser Leu
 405 410 415

Val His Asn Leu Thr Lys Glu Leu Lys Ser Pro Asp Glu Gly Phe Glu
 420 425 430

Gly Lys Ser Leu Tyr Glu Ser Trp Thr Lys Lys Ser Pro Ser Pro Glu
 435 440 445

Phe Ser Gly Met Pro Arg Ile Ser Lys Leu Gly Ser Gly Asn Asp Phe
 450 455 460

Glu Val Phe Phe Gln Arg Leu Gly Ile Ala Ser Gly Arg Ala Arg Tyr
 465 470 475 480

Thr Lys Asn Trp Glu Thr Asn Lys Phe Ser Gly Tyr Pro Leu Tyr His
 485 490 495

Ser Val Tyr Glu Thr Tyr Glu Leu Val Glu Lys Phe Tyr Asp Pro Met
 500 505 510

Phe Lys Tyr His Leu Thr Val Ala Gln Val Arg Gly Gly Met Val Phe
 515 520 525

Glu Leu Ala Asn Ser Ile Val Leu Pro Phe Asp Cys Arg Asp Tyr Ala
 530 535 540

Val Val Leu Arg Ser Tyr Ala Asp Lys Ile Tyr Ser Ile Ser Met Lys
 545 550 555 560

His Pro Gln Glu Met Lys Thr Tyr Ser Val Ser Phe Asp Ser Leu Phe
 565 570 575

Ser Ala Val Lys Asn Phe Thr Glu Ile Ala Ser Lys Phe Ser Glu Arg
 580 585 590

Leu Gln Asp Phe Asp Lys Ser Asn Pro Ile Val Leu Arg Met Met Asn
 595 600 605

Asp Gln Leu Met Phe Leu Glu Arg Ala Phe Ile Asp Pro Leu Gly Leu
 610 615 620

Pro Asp Arg Pro Phe Tyr Arg His Val Ile Tyr Ala Pro Ser Ser His
 625 630 635 640

Asn Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Leu Phe
 645 650 655

Asp Ile Glu Ser Lys Val Asp Pro Ser Lys Ala Trp Gly Glu Val Lys
 660 665 670

Arg Gln Ile Tyr Val Ala Ala Phe Thr Val Gln Ala Ala Ala Glu Thr
 675 680 685

Leu Ser Glu Val Ala
 690

<210> 3

<211> 25

<212> DNA

<213> Homo sapiens

<400> 3

tggtcagca ccaccagata gcagc

<210> 4
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 4
ctatgatgca cagaagctcc tagaa

25

<210> 5
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 5
tgtagggcac ttgagactt cct

23